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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/036,171	12/31/2001	Elazar Sonnenschein	0-05-204	4832

7590 10/18/2007  
Kevin D. McCarthy  
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EXAMINER
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LEUBECKER, JOHN P

ART UNIT	PAPER NUMBER
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3739

MAIL DATE	DELIVERY MODE
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10/18/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

### Application No.

10/036,171

### Applicant(s)

SONNENSCHN ET AL.

### Examiner

John P. Leubecker

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 July 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 75-99 and 105-159 is/are pending in the application.
- 4a) Of the above claim(s) See Continuation Sheet is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 76, 77, 79, 92-95, 105, 120-122, 136, 139, 143, 146-148 and 150-155 is/are rejected.
- 7) ☒ Claim(s) See Continuation Sheet is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

Continuation of Disposition of Claims: Claims withdrawn from consideration are 75,81-90,96,98,99,106,112-118,126-129,140-142 and 161-165.

Continuation of Disposition of Claims: Claims objected to are 78,80,91,97,107-111,119,123-125,130-135,137-139,144,145,149,156,159,160 and 166-169.

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***Election/Restrictions***

1. Applicant's election of Species I in the reply filed on July 2, 2007 is acknowledged.

Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

***Specification***

2. The abstract of the disclosure is objected to because it should avoid phrases which can be implied, such as "The present invention relates...". Correction is required. See MPEP § 608.01(b).

***Claim Objections***

3. Claim 160 is objected to because of the following informalities:

As to claim 160, the phrase "that transmits only, receives only or both transmits/receives" should be deleted.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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5. Claim 122 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The disclosure fails to disclose the step of “replacing” the transducer/reflector configuration with any other transducer/reflector configuration. The transducer/reflector configurations claimed appear to be separate embodiments and are not disclosed as being capable of conversion between each other (i.e., by replacing elements).

6. Claims 92, 93, 95, 105, 120, 121, 136, 139, 143, 146-148 and 150-155 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claim 92, term “reflecting layers (step height)” lacks antecedent basis. It appears that this term should be –reflecting surfaces--.

As to claim 93, term “reflecting surfaces” lacks antecedent basis. Changing the dependency to claim 77 will correct this.

As to claim 95, term “the air gaps” lacks antecedent basis. Deleting the word “the” will correct this.

As to claim 105, terms “said transmitter” (lines 13 and 16) lack antecedent basis. It appears that these terms should be –transducer--.

As to claim 120, terms “said transmitter/receiver” (lines 8 and 9) lack antecedent basis. It appears that these terms should be –transducer--.

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As to claim 121, terms “said transmitter/receiver” (lines 8 and 9) lack antecedent basis. It appears that these terms should be –transducer--.

As to claim 136, term “reflecting layers (step height)” lacks antecedent basis. It appears that this term should be –reflecting surfaces--.

As to claim 139, term “the air gaps” lacks antecedent basis. Deleting the word “the” will correct this.

As to claim 143, terms “the transmitter/receiver” and “the ultrasonic beam” lack antecedent basis. It appears that the claim should read “using a single transducer as a transmitter/receiver of an ultrasonic beam”.

As to claim 146, terms “the transmitter/receiver” and “the ultrasonic beam” lack antecedent basis. It appears that the claim should read “using a single transducer as a transmitter/receiver of an ultrasonic beam”. In addition, terms “transmitter” should be –transmitter/receiver—in lines 18 and 19. to be consistent with that which is previously claimed.

As to claim 147, terms “said transmitter/receiver” (lines 2 and 3) lack antecedent basis. It appears that these terms should be –transducer--.

As to claim 148, terms “said transmitter/receiver” (lines 3 and 4) lack antecedent basis. It appears that these terms should be –transducer--.

As to claim 150, term “the air gaps” lacks antecedent basis. Deleting the word “the” will correct this.

As to claims 151, term “transmitter” lacks antecedent basis. It appears that this term should be –transducer--.

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As to claims 152, term “transmitter/receivers” lacks antecedent basis. It appears that this term should be –transducers--.

As to claim 153, term “transmitter/receiver” (lines 3 and 4) lack antecedent basis. It appears that these terms should be –transducer--.

As to claim 154, term “the air gaps” lacks antecedent basis. Deleting the word “the” will correct this.

As to claim 155, term “transmitter” lack antecedent basis. It appears that these terms should be –transducer--.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 76, 77, 79, 94, 157 and 158 are rejected under 35 U.S.C. 102(b) as being anticipated by Haynes (U.S. Pat. 4,805,453).

Haynes discloses endoscopic device comprising a system (probe 7) for measuring the distance between and the relative alignment of two objects located at two different locations along the length of said endoscopic device, said endoscopic device comprising: one or more single ultrasonic transducers (20), used to both transmit and receive the ultrasonic signals (col.6, lines 14-22), mounted on, or near, the first object (bottom of 101) and at least one reflector (11-

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15) is mounted on, or near, the second object (locations along support 101), said reflector being suitable to reflect back a pattern that can be translated into the position and orientation of said objects relative to each other. Taking the surfaces 11 and 12 as a “reflector”, the surfaces form parallel surfaces intersected by a plane (of support 101) at 90 degrees. The surfaces (11-15) have different depths, lengths and cross-sections. As to claim 94, the probe is elongated a thus “adapted” for insertion into a human body. As to claims 157 and 158, the transducer is a “standard ultrasonic receiver/transmitter” which would include single element and element arrays.

***Allowable Subject Matter***

9. Claims 78, 80, 91, 97, 107-111, 119, 123-125, 130-135, 137-139, 144, 145, 149, 156, 159, 160, and 166-169 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. Claims 92, 93, 95, 105, 120-122, 136, 143, 146-148 and 150-155 are would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 1<sup>st</sup> and 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.



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***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ahrens (U.S. Pat. 4,868,796)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John P. Leubecker whose telephone number is (571) 272-4769.

The examiner can normally be reached on Monday through Friday, 6:00 AM to 2:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda C.M. Dvorak can be reached on (571) 272-4764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/John P. Leubecker/  
Primary Examiner  
Art Unit 3739

jpl